1   ABSTRACT OF THE DISCLOSURE

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3   Systems, methods and apparatus are provided for

4   demapping a received wireless signal. The wireless signal

5   includes signal-bearing data without accompanying pilot

6   signals, and demapping is accomplished by extracting

7   information from the signal-bearing data by reducing and

8   averaging differential quadrature components or quadrature

9   components of the received signal. Two embodiments are

10 provided for the demapping procedure within a phase

11 tracking loop. A first embodiment corrects the received

12 signal, while a second embodiment corrects the

13 constellation points